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Micro-Timer Test Equipment

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SENIOR DESIGN

TECHNICAL REPORT

for

MICRO-TIMER TEST EQUIPMENT

title

in partial fulfillment of the requirements
for the degree of
BACHELOR OF SCIENCE



presented to the
ELECTRICAL ENGINEERING TECHNOLOGY FACULTY
INDIANA UNIVERSITY-PURDUE UNIVERSITY AT FORT WAYNE

August 22, 1980

date

by

John Clevenger

GRADE

APPROVED

ABSTRACT

MICRO-TIMER TEST EQUIPMENT

By John Clevenger

This project centers around the required test equipment for King Seeley Thermos Company's Micro-Timer products. One semiautomatic test/calibration station and two manual test sets were scheduled for Production, Quality Control and the Customer. An additional goal was the design of an all-purpose logic stepper board for multiple uses.

The Micro-Timer product is built in two versions and is based on two resistor-capacitor timing circuits, one of which is programmable and comprises the entire -2 model. The test set concepts ranged from microprocessor and programmable controller based testers to the small scale integrated circuit designs. The final design for the production test set is based on an earlier design which I completed in December 1979 and uses many materials which I now consider to be standard design items.

The project was completed after delays and several problems forced one of the models to be shelved. Three manual test sets were completed and released only to be recalled due to product and test set design problems. These problems have been corrected and the test sets were re-released on August 15, 1980. The semiautomatic version may be completed with mechanical and electrical corrections at a future date.

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